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22045

7590

04/30/2010

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EXAMINER

REDDY, KARUNA P

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

04/30/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This office action is in reference to the amendment filed 2/5/2010. Claims 1-19 are cancelled. Accordingly, claims 20-39 are currently pending in the application.

Given that no amendments are made and the grounds of rejection remain unchanged from that set forth in the preceding office action, it is proper to make this action final.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

3. Claims 20-27, 29-31, 34-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998).

The rejection is adequately set forth in paragraph 3 of office action mailed 11/5/2009.

4. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998), as applied to claim 31 above, in view of Miyamoto et al (JP 2002-020601).

The rejection is adequately set forth in paragraph 4 of office action mailed 11/5/2009.

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5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998), as applied to claim 27 above, and further in view of Famili et al (5,362,778).

The rejection is adequately set forth in paragraph 5 of office action mailed 11/5/2009.

6. Claims 33 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ritter et al (US 5,439,953) in view of Wendel et al (US 5, 358, 998), as applied to claim 31 above, and further in view of Hashemzadeh et al (US 2002/0135086 A1).

The rejection is adequately set forth in paragraph 6 of office action mailed 11/5/2009.

Response to Arguments

7. Applicant's arguments filed 2/5/2010 have been fully considered but they are not persuasive. Specifically, applicant argues that (A) the final form of polymers brought into contact with starch is an aqueous dispersion. Ritter's process does not involve a composition which contains both starch and redispersible polymer **powder** (emphasis added by applicant); (B) Wendel's polymer dispersion is essentially a homogenized polymer solution stabilized by the starch degradation products such as sugared products. In contrast Ritter's polymer dispersion is essentially a two-phase dispersion, formed of water phase and water-insoluble polymer phase. Hence, the availability and accessibility of water essential for starch digestion, in Ritter, is potentiated by the water insolubility of Ritter's polymers; (C) Wendel's teaching of redispersible polymer powder

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cannot be isolated from Wendel's as a whole, nor can Wendel be combined with Ritter in total disregard for the salient features that are drastically different between Wendel and Ritter.

With respect to (A), Graham v. Deere analysis was made and motivation to bring in teachings from secondary reference of Wendel to use polymer in the form of redispersible polymer powder was articulated clearly in paragraph 3 of office action mailed 11/5/2009.

With respect to (B), firstly, both are directed to compositions comprising starch as well as polymers instantly claimed. Secondly, Ritter et al disclose materials based on starch which is thermomechanically digested at elevated pressures and temperatures and with the addition of water and/or lower molecular weight plasticizing agents. Hence, it is clear that starch, in an alternative embodiment, is thermomechanically digested with the addition of lower molecular weight plasticizing agents and does not require water.

With respect to (C), as stated earlier, Wendel is only used for its teaching that polymer dispersions comprising functionalized monomers provide increased internal strength, are redispersible (i.e. can be dispersed in water at a later stage) and the redispersible powder provides for ease of handling, storage and transportation. Case law holds that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

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applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796